

<b>Solicitation, Offer and Award</b>		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)		RATING	PAGE 1	OF PAGES
2. CONTRACT NO.	3. SOLICITATION NO.  DTFH61-97-R-00033	4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	5. DATE ISSUED  4/15/97	6. REQUISITION/PURCHASE NO.  74-20-7008		
7. ISSUED BY  Federal Highway Administration Office of Acquisition Management 400 Seventh Street, SW, Room 4410 Washington, DC 20590			CODE [HAM-30_] 8. ADDRESS OFFER TO (If other than Item 7)			

NOTE: In sealed bid solicitation "offer" and "offeror" mean "bid" and "bidder".

### SOLICITATION

9. Sealed offers in original and **seven** copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in **Same As Block No. 7** until **4:15 p.m.** local time **June 3, 1997**.

(Hour) (Date)  
CAUTION - LATE Submission, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-10. All offers are subject to all terms and conditions contained in this solicitation.

<b>10. FOR INFORMATION CALL:</b>	A. NAME	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS)
	Lise S. Lyles	(202) 366-4229

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### OFFER (Must be fully completed by offeror)

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within \_\_\_\_\_ calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232-8)		10 Calendar Days %	20 Calendar Days %	30 Calendar Days %	Calendar Days
14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:.		AMENDMENT NO.	DATE	AMENDMENT NO.	DATE
15A. NAME AND ADDRESS OF OFFEROR	CODE _____ FACILITY _____		16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)		
15B. TELEPHONE NO. (Include area code)	15C. CHECK IF REMITTANCE ADDRESS IS <input type="checkbox"/> DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE		17. SIGNATURE		18. OFFER DATE

### AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION
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22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:		
<div><div></div><div>10 U.S.C. 2304(c)( )</div></div> <div><div></div><div>41 U.S.C. 253(c)( )</div></div>	23. SUBMIT INVOICES TO ADDRESS SHOWN IN <i>(4 copies unless otherwise specified)</i>	ITEM
24. ADMINISTERED BY <i>(If other than Item 7)</i> CODE	25. PAYMENT WILL BE MADE BY CODE	
26. NAME OF CONTRACTING OFFICER <i>(Type or print)</i>	27. UNITED STATES OF AMERICA  <i>(Signature of Contracting Officer)</i>	28. AWARD DATE

IMPORTANT - Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

NSN 7540-01-152-8064STANDARD FORM 33 (Rev. 4-85)  
PREVIOUS EDITION NOT USABLE 33-134Prescribed by GSA  
FAR (48 CFR) 53.214(c)  
GPO : 1987 O - 181-247 (40254)

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**SECTION A - SOLICITATION/CONTRACT FORM**

**P A R T I****SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS**

1. The Contractor shall furnish all necessary facilities, materials, and personnel and shall perform all services necessary to develop a comprehensive, practical (user-friendly), state-of-the-art highway storm water pump station design manual with an accompanying software design package and training course entitled "Storm Water Pump Station Design and Training Material."
2. The total estimated cost plus fixed fee for the performance of this contract is \$\_\_\_\_\_, which consists of the estimated cost of \$\_\_\_\_\_, and a fixed fee of \$\_\_\_\_\_.
3. All travel shall be reimbursed at cost in accordance with the Travel and Per Diem clause (reference Section G). Travel and per diem shall not exceed \$6,000. This amount is contained within the total contract value as stated above.

**SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK****STATEMENT OF WORK****Contract Objectives**

1. Develop a comprehensive and practical design manual which provides state-of-the-art highway storm water pump station design methods and techniques to assist the highway engineer in designing storm water pump stations.
2. Develop a software package to perform the functions associated with pump station design.
3. Develop a one-day training course to be used to teach highway personnel effective pump station design principles. This training course will typically be presented in conjunction with the National Highway Institute (NHI) course 13027 entitled *Urban Drainage Design* (see Section L page 47).

**Scope of Work**

Find and review relevant technical material associated with highway storm water pump station design. Identify and review existing software currently in use to design highway storm

water pump stations. Review the current Federal Highway Administration (FHWA) training materials to identify the format for the pump station training material.

Develop a detailed outline for an effective pump station design manual. Summarize features and limitations of existing pump station design software and provide recommendations for further development. Develop an outline for a one day training course on pump station design based on the design manual and software to be developed as part of this project.

Develop a comprehensive and practical manual for the design of highway storm water pump stations.

Develop a software package for use in the design of pump stations. The software will either need to be completely developed or developed from existing software depending on the results of the survey of existing software. A User's Manual will be provided with the software.

Develop a one-day training course to be used in teaching the material developed in the design manual and computer software. The training materials shall include a Participant's Workbook, an Instructor's Guide and all visual aids required to present the training course.

### **Delineation of Tasks**

To achieve the contract objectives, the contractor shall perform, as a minimum, the following tasks:

#### **Task A - Literature Review**

1. Review existing technical information regarding the design of highway storm water pump station facilities. Sources of this information shall include, but not be limited to, various guides, texts, manuals, and research reports as well as material from State Departments of Transportation (DOT) and manufacturers of pump equipment. The review shall focus on materials produced since 1982. References expected to be useful are: FHWA's *Manual for Highway Storm Water Pumping Stations Volumes 1 and 2*; the American Association of State Highway and Transportation Officials' (AASHTO) *Model Drainage Manual*; and FHWA's HEC-22 entitled *Urban Drainage Design Manual* (see Section L page 47). Consideration should be given to material specifically applicable to highway storm water pump station design where storage is a common consideration.
2. Review current practice in approximately ten (10) state DOT's which are actively using storm water pump stations. The FHWA will identify the states to be used in this

effort. This review should identify the design procedures as well as the equipment used. Comments and recommendations should be sought from those defined DOT's.

3. Obtain and review the supporting documentation for FHWA identified existing software, both public and private, that has been developed for the specific use defined in this document. One specific reference would be the Texas Department of Transportation THYSIS program. Attention should be given to the potential for expanding, adopting, adapting, etc. as well as developing as may be possible to minimize the effort required to get a functional end product.
4. Review existing training materials used for current NHI hydraulic training courses. The primary reference for this review should be NHI Course No. 13067 - *Practical Highway Hydrology* (see Section L page 47).
5. Prepare an annotated bibliography including all pertinent references, software, training materials and other materials that will be considered appropriate for this project.

#### **Task B - Prepare Outline and Report on Existing Software**

1. Prepare a working outline for the proposed manual using information obtained in Task A. HEC-22 is recommended as an example of the preferred format. The publication shall include, but not be limited to, the following:
  - a. Introduction
    - 1) Document overview
    - 2) Definition of terms
  - b. Summary of Current Practice
  - c. Site Considerations
    - 1) Access
    - 2) Offsite drainage
    - 3) Energy supply
    - 4) Aesthetics and security
    - 5) Storage potential
  - d. Collection System
    - 1) Hydrographs
    - 2) Collection lines
    - 3) Debris handling
    - 4) Storage features

- e. Pump Station Types and Equipment
  - 1) Wet pit
  - 2) Dry pit
  - 3) Pump types
    - (a) How and where used
    - (b) Advantages and disadvantages
  - 4) Pump drivers
  - 5) Pump controls
  - 6) System appurtenances
- f. Pump Station Design
  - 1) Storage characteristics
  - 2) Pump cycling
  - 3) Mass curve routing procedure
  - 4) Pump station sizing
  - 5) Pump performance
    - (a) Total dynamic head (TDH)
    - (b) System head curves
    - (c) Performance curves
    - (d) Net positive suction head (NPSH)
  - 6) Balancing storage vs pump rate
- g. Pump Station Features
  - 1) Ventilation
  - 2) Stairs/ladders
  - 3) Cleaning and debris removal
  - 4) Pump removal facilities
  - 5) Water supply and sanitary service
  - 6) Safety features
- h. Pump Station Operation
  - 1) Maintenance
  - 2) Emergency operation
- i. Mechanical and Electrical Features
  - 1) Basic information for Civil Engineers
    - (a) Supply voltage
    - (b) Electric motor starting
    - (c) Bearings and seals
    - (d) Lubrication
    - (e) Service factor

2. Provide a report summarizing all existing software programs that have been identified and reviewed. The report shall contain the following as a minimum:
  - a. Listing of all software packages defined.
  - b. Summary of the capabilities and limitations of each program.
  - c. Recommendations regarding the potential use for each defined package.
  - d. Recommendations regarding the development of a completely new software package.
3. On or before 4 months after the effective date of the contract, provide to the Contracting Officer's Technical Representative (COTR) six copies of the draft outline of the manual and annotated bibliography as well as six copies of a report on existing software. Provide to the contracting officer one copy of the transmittal letter. The Government will review the draft outline and bibliography and furnish written comments to the Contractor within 30 days after receipt. The Contractor shall incorporate the Government's written comments into the outline and bibliography and provide six copies of the final working outline and bibliography to the COTR within 30 days after receipt of the Government's written comments. Provide to the Contracting Officer one copy of the transmittal letter. The Government reserves the right to modify the working outline during the development of the manual. A bibliography shall be included in the final manual.

**THE CONTRACTOR SHALL NOT PROCEED WITH TASK C UNTIL RECEIPT OF WRITTEN AUTHORIZATION FROM THE CONTRACTING OFFICER.**

**Task C - First Draft of the Design Manual**

1. Develop a comprehensive and practical manual of storm water pump station design methods and techniques following the outline developed in Task B to assist the highway engineer in the analysis and design of pump station components. It shall include background material, design considerations and procedures, and example problems to illustrate the individual and overall procedures. The example problems shall follow in a logical manner to be built upon each other and result in a complete pump station design.

**NOTE:** The manual shall be prepared in metric units. See "Specifications for Tasks C, D and E".

2. On or before 12 months after the effective date of the contract, provide to the COTR six review copies of a first draft of the manual. Provide to the Contracting Officer one copy of the transmittal letter. The Government will review the manual as submitted and provide written comments to the Contractor within 60 days after receipt.

#### **Task D - Second Draft of the Design Manual**

1. Revise the first draft of the design manual to reflect the Government's written comments and provide to the COTR six copies of a second draft of the manual within 45 days of receipt of the Government's written comments. Provide to the Contracting Officer one copy of the transmittal letter. The Government will review the second draft submission and provide written comments to the Contractor within 45 days of receipt.

#### **Task E - Final Design Manual**

1. Revise the second draft of the design manual to reflect the Government's written comments and deliver a camera ready reproducible and six copies of the final manual to the COTR 30 days after completion of task D. Provide to the Contracting Officer one copy of the transmittal letter.
2. In addition, provide to the COTR, one copy of the final design manual on two sets of IBM-PC-compatible diskettes (MS DOS 90 mm size) and two sets of CD-ROM's. This shall include:
  - a. WordPerfect version 6.1 files which contain the complete chapters for the manual. All figures, tables, pictures, and sketches shall be incorporated into the WordPerfect files via figure boxes, table boxes, text boxes, and/or user boxes.
  - b. Separate files for each figure, table, picture, and sketch. The file shall be in either PCX or CGM format.

**THE CONTRACTOR SHALL NOT PROCEED WITH TASKS F AND G UNTIL RECEIPT OF WRITTEN AUTHORIZATION FROM THE CONTRACTING OFFICER.**

#### **Task F - Training Course Outline and Visual Aid Examples**

This task shall include the preparation of a detailed training course outline, a draft of the first chapter of the Instructor's Guide, and representative visual aids as described below.

The Contractor will be furnished a copy of the Instructor's Guide and the Participant's Workbook for NHI Course Number 13067 - *Practical Highway Hydrology* (see Section L page 47) by the COTR to be used as a guide and to assure complete understanding of what will and will not be acceptable as a final product.

The course shall be designed to help engineers and technicians understand the application of pump station design principles as they relate to highway storm drainage design. It shall be fundamental with an emphasis on practical design applications. The students should be required to work example problems stressing real design situations.

## 1. Course Outline

Develop an outline for a one-day training course. The course shall present the highlights of the design manual and shall be laid out in about one-hour segments. The following shall be considered for inclusion in the course.

- a. Site considerations
- b. The collection and storage system
- c. Pump types and pump station layout
- d. Pump and pump station sizing
  - 1) Inflow hydrograph
  - 2) Stage - storage curve
  - 3) Mass curve routing
  - 4) Pump station layout and sizing
  - 5) Manufacturers' performance curves
- e. Mechanical and electrical overview
- f. Manual and computer solution to a representative problem set

The course outline shall detail the objectives, content, schedule, and the presentation methods to be used. The outline shall identify the sessions, how they fit together, and the scope and objectives of each. The teaching methods, techniques, software and visual aids that will be used in each session shall be listed.

## 2. Develop Draft Course Materials

As part of this task, the Contractor shall develop a draft of the first chapter of the Instructor's Guide. The draft shall follow the guidance given for the Instructor's Guide in Task G of this document.

## 3. Visual Aids

Provide examples of visual aids being considered for the training course. Visual aids must be of professional quality and could include slides shown directly with a multimedia projector, 35 mm slides, and/or overhead transparencies. Other visual aid development methods will also be considered upon recommendation from the Contractor.

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#### 4. Material Submission and Review

On or before 12 months after the effective date of the contract, provide to the COTR six copies of the training course outline, the draft chapter of the Instructor's Guide and visual aid examples. Provide to the Contracting Officer one copy of the transmittal letter. The Government will review the material submitted and provide written comments within 30 days after receipt.

#### **Task G - First Draft of the Instructor's Guide and Visual Aids**

Tasks G, H, and I will provide the complete training course. The Contractor shall develop the Instructor's Guide and the visual aids first and then proceed with the Participant's Workbook. The course materials shall include, as a minimum, the materials outlined below:

##### 1. Participant's Workbook

- a. Develop a Participant's Workbook that shall include, as a minimum, the following:
  - 1) General course information, including a class schedule, introduction, table of contents, and course objectives.
  - 2) Title, time allocation, and objectives for each session.
  - 3) Example designs to be worked by the participant in step-by-step detail with relevant charts, graphs, tables, etc. as needed for the example.
  - 4) Suggested reading assignments from the design manual that are applicable to the topic.
- b. The Participant's Workbook shall contain both an outline and summary text of the technical material presented in each session. The basic text for the course will be the design manual prepared as part of this contract. The full text will not be repeated in the Participant's Workbook. It shall provide space for supplementary note taking and annotation. This shall provide the participant with an opportunity to retain the formal course material with additional information acquired during group discussions.

Illustrative examples (such as case histories, design problems, and computer solutions) and reference material shall be included to assure the workbook's future usefulness.

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Copies of visual aids such as tables, graphs and design charts shall be included as well as photographs (prints and slides) to ensure complete and effective coverage of the subject matter. Copies of all slides, overheads, and visual aids shall be of professional quality.

- c. The Participant's Workbook shall be developed as a summary support document to be used with the design manual. It shall be designed so the participants will have a valuable, user-oriented reference that will provide specific guidance for the development of pump station designs for highway storm water runoff.

## 2. Instructor's Guide

- a. The Instructor's Guide shall include all of the material included in the Participant's Workbook and provide all additional information needed by an instructor of the course. It shall tie text material, visual aids, example design problems, etc. into a logical sequence. The Instructor's Guide and the Participant's Workbook shall be organized in an identical manner and shall be self-contained. The Guide and the Workbook will match each other page for page. The only difference will be that the Instructor's Guide will include specific information for the instructor presenting the course.
- b. The Instructor's Guide shall thoroughly describe the procedures for setting up and teaching the course. It shall contain lesson plans and lecture notes for teaching each session. Supporting materials shall be incorporated directly, if practicable. If not, a summary shall be provided which is sufficient for background and the full text cross-referencing. Case histories shall be described in detail.

The same sequence for presenting the course shall be used in the Instructor's Guide as it is in the Participant's Workbook with lecture notes annotated by additional materials to cover points that may come up during discussions.

The Instructor's Guide shall contain, as a minimum:

- 1) Title.
- 2) An introduction describing the format used.
- 3) Training objectives and suggested teaching methods.
- 4) Course outline.
- 5) A lesson plan for each session, which shall include:
  - Training objectives
  - Lesson outline

List of references

Inventory of visual aids and equipment needed

Time allocation

Instructions to present the material and tailor it for different groups

A plan to evaluate the effectiveness of each lesson

Lesson lecture notes

Copies of all visual aids and handouts. Visual aids shall be incorporated into the text of the manual and be numbered sequentially by lesson

Answers to typical questions, pitfalls to avoid, and major lecture points

Example design problems and solutions.

- 6) Instructions for evaluation of the course and a copy of the NHI Course Evaluation Form.
- 7) Copies of any pertinent reference materials that may be of assistance to instructors.

### 3. Visual Aids

For each session, the most suitable type of visual aid (or combination of aids) shall be developed to support and reinforce the subject material. This shall include, but not be limited to: developing slides and transparencies; selecting or shooting photographs for use in the Participant's Workbook and the Instructor's Guide; outlining chalk board or flip chart work; preparing graphs, charts, tables, etc. for the Workbook and Guide; and preparing overhead transparencies. All visual aids shall be of professional quality.

Graphic material shall be simple in design and have large, bold lettering. Slides and overheads shall be designed to be viewed with as much background light as possible. If audiovisual aids are used, they shall be selected from videotapes (or films) available through the FHWA, or from other sources and with the approval of the COTR.

### 4. Material Submission and Review

Develop the first draft of an Instructor's Guide and visual aids and submit to the COTR for review 90 days after authorization to proceed with Task G. Provide to the Contracting Officer one copy of the transmittal letter. The Government will review the Instructor's Guide and the visual aids and provide written comments within 30 days of receipt. The Participant's Workbook shall be developed following the Instructor's Guide and shall be essentially identical to the Instructor's Guide without the notes to the Instructor.

## **Task H - Second Draft of the Instructor's Guide and the Visual Aids and the First Draft of The Participant's Workbook.**

Submit to the COTR the second draft of the Instructor's Guide, the first draft of the Participant's Workbook and the second draft of the visual aids within 60 days of receipt of the Government's written comments on Task G. Provide to the Contracting Officer one copy of the transmittal letter. The Participant's Workbook shall be developed following the Instructor's Guide and shall be essentially identical to the Instructor's Guide without the notes to the Instructor. The Government will review the submittal and provide written comments within 30 days of receipt of the submission.

**Task I - Final Copy of the Instructor's Guide, the Participant's Workbook, and the Visual Aids**

Incorporate the Government's written comments into the documents and submit to the COTR the final copy of the Instructor's Guide, the final copy of the Participant's Workbook, and the final set of the visual aids 30 days after receipt of the Government's written comments on Task H. Provide to the Contracting Officer one copy of the transmittal letter. This final submission shall include a camera ready reproducible of the Guide and Workbook and six hard copies of each document.

In addition, provide to the COTR, one copy of the final Instructor's Guide and Participant's Workbook on two sets of IBM-PC-compatible diskettes (MS DOS 90 mm size) and two sets of CD-ROM's. This shall include:

1. WordPerfect version 6.1 files which contain the complete chapters for both the Guide and the Workbook. All figures, tables, pictures, and sketches shall be incorporated into the WordPerfect files via figure boxes, table boxes, text boxes, and/or user boxes and
2. Separate files for each figure, table, picture, and sketch. The file shall be in either PCX or CGM format.

The final visual aid submission shall include two sets of the presentation graphics on IBM-PC-compatible diskettes ( MS DOS 90 mm size), six sets of the presentation graphics on CD-ROM, six complete sets of 35 mm slides containing the presentation graphics material as well as all other photographs, etc. that will be used in the presentation, and six copies of the transparencies needed to present the course.

**Task J - Macro-Level Flow Chart**

1. Provide a macro-level flow chart and conceptual input and output screens (and output files/ plots) for the pump station design software. The Contractor shall provide the

following:

- a. a draft macro-level flow chart
  - b. preliminary conceptual versions of all the software's Windows NT environment input and output screens
  - c. a preliminary version of the hard copy output.
2. Materials for this task shall be submitted to the COTR 8 months after the effective date of the contract. Provide to the Contracting Officer one copy of the transmittal letter. The Government will review the flow chart and provide written comments within 30 days after receipt.

#### **Task K - Alpha Version of Software Package**

1. Develop an alpha version of a computer program to aid in the design of the pump station. The computer program shall do the following as a minimum:
  - a. Receive an existing hydrograph.
  - b. Develop a stage-storage curve for geometric shapes to include:
    - 1) Rectangular and circular pipe shapes on a slope
    - 2) Arch and oval pipe shapes on a slope
    - 3) Rectangular, oval and circular open pits with various side slopes
    - 4) Irregular shaped open pit when incremental stage and storage is input
  - c. Develop an inflow mass curve.
  - d. Develop a mass curve routing procedure for various selected pump combinations and various start/stop considerations.
  - e. Import the inflow hydrograph and the stage-storage curve into the routing procedure. It must also be capable of importing and incorporating pump manufacturer performance curve data either manually or electronically.
  - f. Provide detailed output information for any point in time during a runoff event. This could include accounts of pump start and stop times, pumps running, pumping rates, accumulated storage volumes, TDH, NPSH, and system head curves. The output should provide the information in both tabular and graphic forms.

2. Development of the microcomputer program

- a. The program will be one integrated program (pre-processor, analysis engine, and post-processor) that is accessed and run from a single windows icon, and that will not require the user to exit one program and enter another to perform the next task. The program shall be a Microsoft Windows environment PC program that will take full advantage of the multi-tasking and utility features of the Microsoft Windows NT environment. The software will be written for a Pentium machine with 16 megabytes of internal memory.
- b. The program shall allow for all input, output, and graphics to be presented in both metric and English units.
- c. The program shall include user-friendly file management capabilities regarding the loading, saving, editing, and viewing of input, output, and graphics files while operating within the software. Standard Windows NT file management interface.
- d. The program shall include Windows hyper-text on line user help. This will be both location specific and/or subject specific help that will be available for anywhere in the program. The entire user's manual and all relevant documents shall be available in hyper-text help.
- e. All interface screens must follow Microsoft's standards and guidelines for Windows environment programs. Any deviations must be approved by the COTR.
- f. Create user friendly, self-explanatory multiple color input and output screens. The program shall have full graphical interface input and output screens which take full advantage of the Windows-NT environment graphical interface. Each user interface screen shall have clear directions regarding user key options while within the program (location specific notes at the bottom of the window). All the possibilities shall be covered in the program. Input error checking routines shall be included to validate pertinent information. Data checks shall be performed for each input parameter in real time.
- g. As a minimum, the user shall be able to both print or "Snapshot" to the windows clipboard all input and output interface screens.
- h. All interface screens shall give a 3D look and all figures shall have color, width, length, and depth (shading).

- i. The interface screens shall have a tool bar line similar to the Microsoft program "Excel for Windows". The tools selected for the bar shall take full advantage of the multi-tasking and utility features within the Microsoft Windows NT environment, allowing the user to customize. Tool bar buttons shall be created to simplify and speed user navigation through the program options.
- j. The source code prepared under this contract shall be the property of the Government. The Contractor shall supply the government with the following:
  - 1) All the program source code.
  - 2) All batch files required for compiling the source code and manuals needed to compile the source code.
  - 3) Any specialty files needed for the compiler or program to perform properly in the computer designated in the contract.
  - 4) Complete typed instruction for the loading and compiling of the software.
  - 5) All compiling software associated with this program.
- k. User's Manual

Create a stand alone document that shall include the following:

- 1) complete discussion of all features;
- 2) general description of the program capabilities and the content of the HELP files;
- 3) executive summary of the technical background and assumptions;
- 4) presentation of all input and output screens with a discussion of each input parameter; and
- 5) narrative description, input file, and output results of example problems.

The User's Manual shall be prepared in accordance with the "Guidelines for Preparing Federal Highway Administration Publications" (FHWA-AD-88-001), dated January 1988. The document shall generally be written using metric terms. English units may be used as necessary to define the English version of the software. Metric units and terms should conform to AASHTO's *Guide to Metric Conversion*.

On or before 12 months after the effective date of the contract, submit to the COTR the Alpha Version of the software package and a draft version of the User's Manual. Provide to the Contracting Officer one copy of the transmittal letter. The Government will review the software and the User's Manual and provide written comments within 60 days of receipt.

**Task L - Beta Version of Software Package**

Submit to the COTR a Beta version of the software package and a revised User's Manual 60 days after approval of Task K. Provide to the Contracting Officer one copy of the transmittal letter. The Government will review the submission and provide written comments 60 days after receipt of the materials.

**Task M - Final Version of Software Package**

Submit to the COTR 60 days after approval of Task L the following:

1. The final version of the software package and the User's Manual. This final submission shall include a camera ready reproducible of the User's Manual and six hard copies of the User's Manual.
2. Two sets of all final User Manual materials on both IBM-PC-compatible diskettes (MS DOS 90 mm size) and CD-ROM's. This shall include:
  - a. WordPerfect version 6.1 files which contain the complete chapters for the User's Manual. All figures, tables, pictures, and sketches shall be incorporated into the WordPerfect files via figure boxes, table boxes, text boxes, and/or user boxes, and
  - b. Separate files for each figure, table, picture, and sketch. The file shall be in either PCX or CGM format.
3. Six copies of the final software on IBM-PC-compatible diskettes (MS DOS 90 mm size) and six copies of the software on CD-ROM's.

Provide to the Contracting Officer one copy of the transmittal letter.

**Task N - Briefings**

During the performance of the contract, 3 one-day briefings may be held in Washington, DC or at a location designated by the COTR. The time and dates for the briefings shall be mutually agreed upon between the COTR and the Principal Author.

The first briefing will cover the working outline and resource material for the manual as well as a report on existing computer software that is available for pump station design. The software report shall include a summary of the available programs as well as an evaluation of their capabilities and limitations. This report should be in sufficient detail to make it possible for the Government to make a decision on how to proceed with the development of a pump station design software package.

The second briefing will be held to discuss the Government's review of the first manual draft and alpha version of the software. The third briefing will be held as determined to be necessary.

## **SPECIFICATIONS FOR TASKS C, D AND E**

The "Guidelines for Preparing Federal Highway Administration Publications (FHWA-AD-88-001)- January 1988" may be used as a guide in the preparation of the design manual.

The manual shall provide units of measurements in the SI (metric) system. Dual units will not be used.

Metric units and terms should conform to AASHTO's *Guide to Metric Conversion*. This document will not be needed for preparation of the proposal.

## **SECTION D - PACKAGING AND MARKING**

D.1 There are NO articles for this section.

## **SECTION E - INSPECTION AND ACCEPTANCE**

E.1 All work hereunder shall be subject to review by the Government. Acceptance of the final design manual, software and documentation, and training course materials shall be made in writing by the Contracting Officer.

E.2 **52.252-2 Clauses Incorporated by Reference. (JUN 1988)**

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

E.3 **52.246-9 Inspection of Research and Development (Short Form). APR 1984**

## **SECTION F - DELIVERIES OR PERFORMANCE**

### **F.1 PERIOD OF PERFORMANCE**

All work and services required hereunder including preparation and submission of the final design manual, software and documentation, and training course materials shall be completed

on or before 22 months from the effective date of the contract.

## **F.2 PLACE OF DELIVERY**

All deliverables and a copy of the monthly reports (See Section G) under the contract shall be delivered F.O.B. Destination, under transmittal letter, to the following address:

Federal Highway Administration  
400 Seventh Street, S.W.  
Washington, D.C. 20590

Attn: [to be filled in at award]

The monthly progress report and other items as specified shall be delivered to the Contracting Officer at the following address:

Federal Highway Administration  
Office of Acquisition Management  
HAM-30, Room 4410  
Washington, D.C. 20590

## **F.3 SCHEDULE OF WORK**

All tasks set forth in the Statement of Work shall be performed in accordance with the work schedule as negotiated. Performance shall begin on the effective date of the contract.

## **F.4 52.242-15 Stop-Work Order. (AUG 1989) -- Alternate I (APR 1984)**

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work order is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either:

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Termination clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule, the estimated cost, the fee, or a combination thereof, and in any other terms of the contract that may be affected, and the contract shall be modified, in writing, accordingly, if:

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; *provided*, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

## **SECTION G - CONTRACT ADMINISTRATION DATA**

### **G.1 MONTHLY PROGRESS REPORT**

The Contractor shall furnish six copies of a monthly letter-type progress report to the Contracting Officer's Technical Representative and one copy to the Contracting Officer, on or before the 15th of the month following the calendar month being reported. Each report shall contain concise statements covering the research activities relevant to the study, including:

- a. A clear and complete account of the work performed on each task.
- b. An outline of the work to be accomplished during the next report period.

- c. A description of any problem encountered or anticipated that will affect the completion of the contract within the time and fiscal constraints as set forth in the contract, together with recommended solutions to such problems; or, a statement that no problems were encountered.
- d. A tabulation of the planned, actual and cumulative person-hours expended by the personnel identified in the Professional Staffing of the contract.
- e. A chart showing current and cumulative expenditures by tasks versus planned expenditures. (See Attachment 1b.)
- f. Current and cumulative hours and costs expended for ADP services (programming, computer time, etc.) or a statement that there were none.

## **G.2 FUNDS AVAILABLE**

- a. Currently, funds in the amount of \$\_\_\_\_\_ are obligated to this contract. This allotment is estimated to cover the following period of performance: <period>
- b. The balance of funding under this contract (\$\_\_\_\_\_) will be obligated subject to availability of funds and formal modification to this contract by the Contracting Officer.
- c. The clause entitle "LIMITATION OF FUNDS" applies to this contract. Any notification required on the part of the Contract shall be made in writing to the Contracting Officer. In the event that the contract is not funded beyond the estimated cost set forth in the schedule, the Contractor shall deliver to the Contracting Officer the data collected and the material produced or in process or acquired in connection with the performance of the project provided herein together with a summary report in five copies of its progress and accomplishments to date.

## **G.3 PAYMENT**

- a. The Contractor may be reimbursed for direct and indirect costs incurred in the performance hereof as are allowable under the provisions of Subpart 31.2, 31.3, 31.6, or 31.7 (as applicable) of the Federal Acquisition Regulation in the not-to-exceed amount of \$\_\_\_\_\_ (to be negotiated) subject to the Limitation of [\_\_\_\_\_] Clause.

- b. The Government shall pay the Contractor for performing this contract the fixed fee specified in the Schedule. Payment of the fixed fee shall be made as specified in the Schedule; provided that after payment of 85 percent of the fixed fee, the Contracting

Officer may withhold further payment of fee until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interest. This reserve shall not exceed 15 percent of the total fixed fee or \$100,000, whichever is less. The Contracting Officer shall release 75 percent of all fee withholds under this contract after receipt of the certified final indirect cost rate proposal covering the year of physical completion of this contract, provided the Contractor has satisfied all other contract terms and conditions, including the submission of the final patent and royalty reports, and is not delinquent in submitting final vouchers on prior years' settlements. The Contracting Officer may release up to 90 percent of the fee withholds under this contract based on the Contractor's past performance related to the submission and settlement of final indirect cost rate proposals.

- c. Each monthly interim payment request shall be supported by a statement of costs incurred by the Contractor in the performance of this contract and claimed to constitute allowable costs. In accordance with the clause 52.232-25, "Prompt Payment," these payments shall be made by the 30th day after receipt of proper request by the designated billing office. Any payments hereunder will be made upon determination by the Contracting Officer that the requirements of the contract are being met.
- d. Final invoice payment shall be made upon the Contracting Officer's determination that all requirements of the contract have been completed. The payment due date for final invoice shall be established in compliance with the clause 52.232-25.
- e. Each monthly interim payment request and the final invoice shall be submitted in accordance with the format contained in the attached "The FHWA Billing Instructions for Cost-Reimbursement Contracts" to be considered proper for payment. Prior approval of the Contracting Officer is required if the Contractor wishes to use a different format.

#### **G.4 INDIRECT COSTS**

Pending the establishment of final indirect cost rates which shall be negotiated based on audit of actual costs as provided in Subpart 42.7 of the Federal Acquisition Regulation, the Contractor shall be reimbursed for allowable indirect costs hereunder at the billing rate of [\_\_TO BE NEGOTIATED\_\_]. This INDIRECT COST provision does not operate to waive the LIMITATION OF [\_\_\_\_\_] Clause. The Contractor's audited final indirect costs are allowable only insofar as they do not cause the Contractor to exceed the total estimated costs for performance of the contract listed on page 2 (SECTION B) and under the PAYMENT provision

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above.

**G.5 TRAVEL AND PER DIEM**

Travel and Per Diem authorized under this contract shall be reimbursed in accordance with the Government Travel Regulations currently in effect.

Travel requirements under this contract shall be met using the most economical form of transportation available. If economy class transportation is not available, the request for payment voucher must be submitted with justification for use of higher class travel indicating dates, times, and flight numbers. All travel shall be scheduled sufficiently in advance to take advantage of offered discount rates, unless authorized by the Contracting Officer.

**G.6 CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR)**

The Contracting Officer has designated \_\_\_\_\_ as Technical Representative (COTR) to assist in monitoring the work under this contract. The COTR is responsible for the technical administration of the contract and technical liaison with the Contractor. The COTR IS NOT authorized to change the scope of work or specifications as stated in the contract, to make any commitments or otherwise obligate the Government or authorize any changes which affect the contract price, delivery schedule, period of performance or other terms or conditions.

The Contracting Officer is the only individual who can legally commit or obligate the Government for the expenditure of public funds. The technical administration of this contract shall not be construed to authorize the revision of the terms and conditions of this contract. Any such revision shall be authorized in writing by the Contracting Officer.

**G.7 SUBCONTRACTS - ADVANCE NOTIFICATION AND CONSENT**

Under this contract, the requirements of FAR 44.2, CONSENT TO SUBCONTRACTS, have been fulfilled for the following subcontracts:

[as negotiated]

Any future change or revision to the Statement of Work or other applicable aspects of this contract shall include the subcontract(s) only to the extent that performance of the subcontract(s) is directly affected by the change or revision.

**G.8 KEY PERSONNEL**

The Contractor has designated \_\_\_\_\_ as the key personnel under this contract. In the event that any key personnel become unavailable to continue in the performance of this contract,

the appointment of a replacement shall be subject to prior approval of the Contracting Officer.

#### **G.9 PROFESSIONAL STAFFING**

The Contractor agrees to assign the following professional staffing to this contract work (as negotiated, see Section L). In the event the Contractor finds it necessary to replace any of the assigned personnel during the performance of the contract, the Contracting Officer shall be notified in advance.

### **SECTION H - SPECIAL CONTRACT REQUIREMENTS**

#### **H.1 COMPUTER RELATED SERVICES**

The contract provides for the following ADP services:

[LIST]

Any change in performance requirements of the contract affecting these items shall be coordinated with the Contract Administrator immediately. The Contractor shall not exceed these limitations without prior approval of the Contracting Officer.

NOTE: At this time availability of Government computer facilities for use under this contract has not been determined. The Contractor shall not expend any funds for ADP services until authorized to do so by the Contracting Officer. See Attachment 4, Section J for FHWA ADP requirements.

**P A R T   I I****SECTION I - CONTRACT CLAUSES****FH.1   Printing Restrictions**

All printing funded by this agreement must be done in conformance with Joint Committee on Printing regulations as prescribed in Title 44, United States Code, and Section 308 of Public Law 101-163, and all applicable Government Printing Office and Department of Transportation regulations.

**NOTE: THE FOLLOWING CLAUSE IS APPLICABLE TO THE CONTRACT WHEN THE TOTAL CONTRACT PRICE EXCEEDS \$100,000.**

**52.203-9 Reserved.**

**NOTE: THE FOLLOWING CLAUSE IS APPLICABLE TO THE CONTRACT WHEN THE TOTAL CONTRACT PRICE EXCEEDS \$100,000.**

**52.222-2 Payment for Overtime Premiums. (JUL 1990)**

(a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed [ \* ] or the overtime premium is paid for work:

- (1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;
- (2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;
- (3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or
- (4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall:

- (1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;
- (2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;
- (3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and
- (4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

[\*Insert either “zero” or the dollar amount agreed to during negotiations. The inserted figure does not apply to the exceptions in subparagraph (a)(1) through (a)(4) of the clause.]

#### **52.252-2 Clauses Incorporated by Reference. (JUN 1988)**

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

#### **I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES**

52.202-1	Definitions.	OCT 1995
52.203-3	Gratuities.	APR 1984
52.203-5	Covenant Against Contingent Fees.	APR 1984
52.203-7	Anti-Kickback Procedures.	JUL 1995
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity.	JAN 1997

**NOTE: THE FOLLOWING CLAUSE IS APPLICABLE TO THE CONTRACT WHEN THE TOTAL CONTRACT PRICE EXCEEDS \$100,000.**

52.203-12 Limitation on Payments to Influence

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	Certain Federal Transactions.	JAN 1990
52.204-4	Printing/Copying Double-Sided on Recycled Paper.	JUN 1996
52.209-6	Protecting the Governments Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment.	JUL 1995
52.215-2	Audit and Records--Negotiation.	AUG 1996

**NOTE: THE FOLLOWING CLAUSE IS APPLICABLE TO THE CONTRACT WHEN THE TOTAL CONTRACT PRICE EXCEEDS \$100,000.**

**NOTE: THE FOLLOWING CLAUSE IS APPLICABLE TO THE CONTRACT WHEN THE TOTAL CONTRACT PRICE EXCEEDS \$100,000.**

52.215-24	SubContractor Cost or Pricing Data.	OCT 1995
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**NOTE: THE FOLLOWING CLAUSE IS APPLICABLE TO THE CONTRACT WHEN THE TOTAL CONTRACT PRICE EXCEEDS \$100,000.**

52.215-23	Price Reduction for Defective Cost or Pricing Data - Modifications.	OCT 1995
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**NOTE: THE FOLLOWING CLAUSE IS APPLICABLE TO THE CONTRACT WHEN THE TOTAL CONTRACT PRICE EXCEEDS \$100,000.**

52.215-25	SubContractor Cost or Pricing Data - Modifications.	OCT 1995
52.215-33	Order of Precedence.	JAN 1986
52.216-7	Allowable Cost and Payment.	FEB 1997
52.216-8	Fixed Fee.	FEB 1997
52.216-11	Cost Contract - No Fee.	APR 1984
52.216-12	Cost-Sharing Contract - No Fee.	APR 1984
52.216-15	Predetermined Indirect Cost Rates.	AUG 1996
52.219-8	Utilization of Small, Small Disadvantaged and Women-Owned Small Business Concerns.	OCT 1995
52.222-3	Convict Labor.	AUG 1996
52.222-26	Equal Opportunity.	APR 1984
52.222-35	Affirmative Action for Special Disabled and Vietnam Era Veterans.	APR 1984

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- 52.222-36 Affirmative Action for Handicapped Workers. APR 1984
- 52.222-37 Employment Reports on Special Disabled Veterans and Veterans of the Vietnam Era. JAN 1988

**NOTE: THE FOLLOWING CLAUSE IS APPLICABLE TO THE CONTRACT WHEN THE TOTAL CONTRACT PRICE EXCEEDS \$100,000.**

- 52.223-2 Clean Air and Water. APR 1984
- 52.223-6 Drug-Free Workplace. JAN 1997

**NOTE: THE FOLLOWING CLAUSE IS APPLICABLE TO THE CONTRACT WHEN THE TOTAL CONTRACT PRICE EXCEEDS \$100,000.**

- 52.225-11 Restrictions on Certain Foreign Purchases. OCT 1996
- 52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement. AUG 1996
- 52.227-14 Rights in Data - General. JUN 1987
- 52.227-16 Additional Data Requirements. JUN 1987
- 52.228-7 Insurance - Liability to Third Persons. MAR 1996
- 52.232-9 Limitation on Withholding of Payments. APR 1984
- 52.232-17 Interest. JUN 1996
- 52.232-22 Limitation of Funds. APR 1984
- 52.232-23 Assignment of Claims. JAN 1986
- 52.232-25 Prompt payment. MAR 1994
- 52.232-28 Reserved.
- 52.233-1 Disputes. OCT 1995
- 52.233-3 Protest After Award. (AUG 1996) -- Alternate I JUN 1985
- 52.242-1 Notice of Intent to Disallow Costs. APR 1984
- 52.242-2 Production Progress Reports. APR 1991
- 52.242-4 Certification of Final Indirect Costs. JAN 1997
- 52.242-13 Bankruptcy. JUL 1995
- 52.243-2 Changes - Cost-Reimbursement. AUG 1987
- 52.244-2 Subcontracts (Cost-Reimbursement and Letter Contracts.). FEB 1997
- 52.244-5 Competition in Subcontracting. DEC 1996
- 52.249-5 Termination for Convenience of the Government (Educational and Other Nonprofit Institutions). SEP 1996
- 52.249-6 Termination (Cost-Reimbursement). SEP 1996

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52.249-14	Excusable Delays.	APR 1984
52.253-1	Computer Generated Forms.	JAN 1991

## **II. DEPARTMENT OF TRANSPORTATION ACQUISITION REGULATIONS (48 CHAPTER 12) CLAUSES**

1252.242-70	Dissemination of information - educational institutions.	OCT 1994
1252.242-71	Contractor testimony.	OCT 1994
1252.242-72	Dissemination of contract information.	OCT 1994

### **52.252-4 ALTERATIONS IN CONTRACT (APR 1984)**

Portions of this contract are altered as follows:

None.

## **P A R T   I I I**

### **SECTION J - LIST OF ATTACHMENTS**

1. Sample Formats for Progress Reports
  - a. Monthly Progress Report - 1 page
  - b. Progress by Task - 1 page
2. Sample Format for Staffing Assignments/Task Breakdown - 1 page
3. Standard Form 1448 and Price Proposal Budget Summary Format - 2 pages
4. FHWA ADP Information and Requirements with ADP Equipment and Services Form and Documentation Guidelines for Microcomputer Applications Information Systems - 10 pages
5. Standard Form LLL, Disclosure of Lobbying Activities - 3 pages
6. Prospectus - 1 page
7. Optional Form 17, Offer Label - 1 page

**P A R T   I V****SECTION K - REPRESENTATIONS, CERTIFICATIONS, AND OTHER  
STATEMENTS OF OFFERORS OR QUOTERS****52.203-4 Reserved**

**NOTE: THE FOLLOWING PROVISION IS APPLICABLE TO THE OFFER WHEN  
THE TOTAL OFFER PRICE EXCEEDS \$100,000.**

**52.204-3 Taxpayer Identification. (MAR 1994)***(a) Definitions.*

“Common parent,” as used in this solicitation provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

“Corporate status,” as used in this solicitation provision, means a designation as to whether the offeror is a corporate entity, an unincorporated entity (e.g., sole proprietorship or partnership), or a corporation providing medical and health care services.

“Taxpayer Identification Number (TIN),” as used in this solicitation provision, means the number required by the IRS to be used by the offeror in reporting income tax and other returns.

(b) All offerors are required to submit the information required in paragraphs (c) through (e) of this solicitation provision in order to comply with reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M and implementing regulations issued by the Internal Revenue Service (IRS). If the resulting contract is subject to reporting requirements described in FAR 4.903, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

*(c) Taxpayer Identification Number (TIN).*

\_\_\_ TIN: \_\_\_\_\_.

\_\_\_ TIN has been applied for.

\_\_\_ TIN is not required because:

\_\_\_ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the U.S. and does not have an office or place of business or a fiscal paying agent in the U.S.;

\_\_\_ Offeror is an agency or instrumentality of a foreign government;

\_\_\_ Offeror is an agency or instrumentality of a Federal, state or local government;

\_\_\_ Other. State basis. \_\_\_\_\_

*(d) Corporate Status.*

\_\_\_ Corporation providing medical and health care services, or engaged in the billing and collecting of payments for such services;

\_\_\_ Other corporate entity;

\_\_\_ Not a corporate entity;

\_\_\_ Sole proprietorship

\_\_\_ Partnership

\_\_\_ Hospital or extended care facility described in 26 CFR 501(c)(3) that is exempt from taxation under 26 CFR 501(a).

*(e) Common Parent.*

\_\_\_ Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this clause.

\_\_\_ Name and TIN of common parent:

Name \_\_\_\_\_

TIN \_\_\_\_\_

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**52.204-5 Women-Owned Business. (OCT 1995)**

(a) *Representation.* The offeror represents that it ( ) is, ( ) is not a women-owned business concern.

(b) *Definition.* “Women-owned business concern,” as used in this provision, means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

**52.209-5 Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters. (MAR 1996)**

(a) The Offeror certifies:

(1) to the best of its knowledge and belief, that:

(i) The Offeror and/or any of its Principals:

(A) Are ( ) are not ( ) presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have ( ) have not ( ), within a 3-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are ( ) are not ( ) presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.

(ii) The Offeror has ( ) has not ( ), within a 3-year period preceding this offer, had one or more contracts terminated for default by any Federal

agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This certification concerns a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under section 1001, title 18, United States Code.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

#### **52.215-6 Type of Business Organization. (JUL 1987)**

The offeror or quoter, by checking the applicable box, represents that:

(a) It operates as \_\_\_\_ a corporation incorporated under the laws of the State of \_\_\_\_\_, \_\_\_\_ an individual, \_\_\_\_ a partnership, \_\_\_\_ a nonprofit organization, or \_\_\_\_ a joint venture; or

(b) If the offeror or quoter is a foreign entity, it operates as \_\_\_\_ an individual, \_\_\_\_ a partnership, \_\_\_\_ a nonprofit organization, \_\_\_\_ a joint venture, or \_\_\_\_ a corporation, registered for business in \_\_\_\_\_ (country).

**52.215-11 Authorized Negotiators. (APR 1984)**

The offeror or quoter represents that the following persons are authorized to negotiate on its behalf with the Government in connection with this request for proposals or quotations:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (list names, titles, and telephone numbers of the authorized negotiators).

**FH.3 OTHER COMMUNICATIONS**

To facilitate communications, please provide your Telefax (FAX) number, if available.

FAX Number: \_\_\_\_\_

**FH.4 FEDERAL PROCUREMENT DATA**

Each Contractor receiving an award over \$25,000 will be requested to provide the information as set forth below:

- (1) Dun and Bradstreet Number: \_\_\_\_\_
- (2) Home Office County and Congressional District: \_\_\_\_\_
- (3) Congressional District of the Principal place of performance:  
\_\_\_\_\_
- (4) SIC (Standard Industrial Code):  
\_\_\_\_\_

**52.219-1 Small Business Program Representations. (JAN 1997)**

- (a) (1) The standard industrial classification (SIC) code for this acquisition is 8742.
- (2) The small business size standard is an annual average gross revenues for the

last three years that does not exceed \$5 million dollars.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

**THIS REQUIREMENT IS NOT A SMALL BUSINESS SET-ASIDE.**

(b) *Representations.*

(1) The offeror represents as part of its offer that it ( ) is, ( ) is not a small business concern.

(2) (Complete only if offeror represented itself as a small business concern in block (b)(1) of this section.) The offeror represents as part of its offer that it ( ) is, ( ) is not a small disadvantaged business concern.

(3) (Complete only if offeror represented itself as a small business concern in block (b)(1) of this section.) The offeror represents as part of its offer that it ( ) is, ( ) is not a women-owned small business concern.

(c) *Definitions.*

*Joint venture*, for purposes of a small disadvantaged business (SDB) set-aside or price evaluation preference (as prescribed at 13 CFR 124.321), is a concern that is owned and controlled by one or more socially and economically.

*Small business concern*, as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

*Small disadvantaged business concern*, as used in this provision, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and (2) has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a

publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR Part 124.

*Women-owned small business concern*, as used in this provision, means a small business concern--

(1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) *Notice.*

(1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small or small disadvantaged business concern in order to obtain a contract to be awarded under the preference programs established pursuant to sections 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--

(i) Be punished by imposition of fine, imprisonment, or both;

(ii) Be subject to administrative remedies, including suspension and debarment; and

(iii) Be ineligible for participation in programs conducted under the authority of the Act.

#### **52.219-2 Equal Low Bids. (OCT 1995)**

(a) This provision applies to small business concerns only.

(b) The bidder's status as a labor surplus area (LSA) concern may affect entitlement to award in case of tie bids. If the bidder wishes to be considered for this priority, the bidder must identify, in the following space, the LSA in which the costs to be incurred on account of manufacturing or production (by the bidder or the first-tier subcontractors) amount to more than 50 percent of the contract price.

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(c) Failure to identify the labor surplus area as specified in paragraph (b) of this provision will preclude the bidder from receiving priority consideration. If the bidder is awarded a contract as a result of receiving priority consideration under this provision and would not have otherwise received award, the bidder shall perform the contract or cause the contract to be performed in accordance with the obligations of an LSA concern.

**52.222-21 Certification of Nonsegregated Facilities. (APR 1984)**

(a) "Segregated facilities," as used in this provision, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise.

(b) By the submission of this offer, the offeror certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The offeror agrees that a breach of this certification is a violation of the Equal Opportunity clause in the contract.

(c) The offeror further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will:

(1) Obtain identical certifications from proposed subcontractors before the award of subcontracts under which the subcontractor will be subject to the Equal Opportunity clause;

(2) Retain the certifications in the files; and

(3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

**NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT  
FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES**

A Certification of Nonsegregated Facilities must be submitted before the award of a subcontract under which the subContractor will be subject to the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

**52.222-22 Previous Contracts and Compliance Reports. (APR 1984)**

The offeror represents that:

(a) It \_\_\_ has, \_\_\_ has not participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the clause originally contained in Section 310 of Executive Order No. 10925, or the clause contained in Section 201 of Executive Order No. 11114;

(b) It \_\_\_ has, \_\_\_ has not, filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

**52.222-25 Affirmative Action Compliance. (APR 1984)**

The offeror represents that:

(a) It \_\_\_ has developed and has on file, \_\_\_ has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2); or

(b) it \_\_\_ has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

**NOTE: THE FOLLOWING PROVISION IS APPLICABLE TO THE OFFER WHEN THE TOTAL OFFER PRICE EXCEEDS \$100,000.**

**52.223-1 Clean Air and Water Certification. (APR 1984)**

The Offeror certifies that:

- (a) Any facility to be used in the performance of this proposed contract is \_\_\_\_, is not \_\_\_\_ listed on the Environmental Protection Agency (EPA) List of Violating Facilities;
- (b) The Offeror will immediately notify the Contracting Officer, before award, of the receipt of any communication from the Administrator, or a designee, of the EPA, indicating that any facility that the Offeror proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and
- (c) The Offeror will include a certification substantially the same as this certification, including this paragraph (c), in every nonexempt subcontract.

**52.223-5 Reserved.**

**NOTE: THE FOLLOWING CLAUSE IS APPLICABLE TO THE CONTRACT WHEN THE TOTAL CONTRACT PRICE EXCEEDS \$100,000.**

**52.227-15 Representation of Limited Rights Data and Restricted Computer Software. (JUN 1987)**

- (a) This solicitation sets forth the work to be performed if a contract award results, and the Government's known delivery requirements for data (as defined in FAR 27.401). Any resulting contract may also provide the Government the option to order additional data under the Additional Data Requirements clause at 52.227-16 of the FAR, if included in the contract. Any data delivered under the resulting contract will be subject to the Rights in Data - General clause at 52.227-14 that is to be included in this contract. Under the latter clause, a Contractor may withhold from delivery data that qualify as limited rights data or restricted computer software, and deliver form, fit, and function data in lieu thereof. The latter clause also may be used with its *Alternates II* and/or *III* to obtain delivery of limited rights data or restricted computer software, marked with limited rights or restricted rights notices, as appropriate. In addition, use of *Alternate V* with this latter clause provides the Government the right to inspect such data at the Contractor's facility.
- (b) As an aid in determining the Government's need to include any of the

aforementioned *Alternates* in the clause at 52.227-14, Rights in Data - General, the offeror's response to this solicitation shall, to the extent feasible, complete the representation in paragraph (b) of this provision to either state that none of the data qualify as limited rights data or restricted computer software, or identify which of the data qualifies as limited rights data or restricted computer software. Any identification of limited rights data or restricted computer software in the offeror's response is not determinative of the status of such data should a contract be awarded to the offeror.

**REPRESENTATION CONCERNING DATA RIGHTS**

Offeror has reviewed the requirements for the delivery of data or software and states (offeror check appropriate block) -

\_\_\_\_ None of the data proposed for fulfilling such requirements qualifies as limited rights data or restricted computer software.

\_\_\_\_ Data proposed for fulfilling such requirements qualify as limited rights data or restricted computer software and are identified as follows:

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Note: "Limited rights data" and "Restricted computer software" are defined in the contract clause entitled "Rights In Data - General."

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## **FH.2 NOTIFICATION OF DEFECTIVE INVOICES**

Each Contractor receiving an award will be requested to identify a person or office to be contacted for prompt notification regarding the receipt by the Government of a defective invoice.

Name \_\_\_\_\_

Title \_\_\_\_\_

Address \_\_\_\_\_

City & State \_\_\_\_\_ Zip Code \_\_\_\_\_

Area Code \_\_\_\_\_ Telephone No. \_\_\_\_\_

Telex No. \_\_\_\_\_ TWX \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

TO BE COMPLETED BY OFFEROR

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

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BY: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

**SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS**

(please show the RFP number and closing date on the forwarding envelope)

NOTE: Only uniformed couriers dressed in a uniform bearing their organization's name and possessing official identification may deliver proposals or sealed bids directly to Room 4410. Security procedures prohibit nonuniformed couriers from delivering material directly to offices in the Nassif Building; such couriers must deliver material to the northeast guard station at the Nassif Building. The guard will accept the material, dismiss the courier, and then the material will be examined prior to being delivered to Room 4410 through the normal Nassif Building mail delivery procedures. Offerors planning to use nonuniformed couriers should make allowances for these procedures in order to assure that offers arrive at Room 4410 on time. Bids/offers must be received in Room 4410 to be considered timely, not just delivered to the Nassif mail room or loading dock. To assist in expediting delivery after the guard accepts a bid/offer, the outside of the envelope/package containing the offer should be marked with the completed Optional Form 17, Offer Label, provided with this solicitation as an Attachment No. 7, see SECTION J.

NOTE: As prescribed by 52.215-16, the Government may award a contract on the basis of initial offers received, without discussion. Therefore, each initial offer should contain the offeror's best terms from a price and technical standpoint.

**NOTE: Facsimile bids/proposals will not be considered for this solicitation.**

**52.215-12 Restriction on Disclosure and Use of Data. (APR 1984)**

Offerors or quoters who include in their proposals or quotations data that they do not want disclosed to the public for any purpose or used by the Government except for evaluation purposes, shall:

(a) Mark the title page with the following legend:

“This proposal or quotation includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed - in whole or in part - for any purpose other than to evaluate this proposal or quotation. If, however, a contract is awarded to this offeror or quoter as a result of - or in connection with - the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government’s right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets \_\_\_\_\_ (*insert numbers or other identification of sheets*)”;

and

(b) Mark each sheet of data it wishes to restrict with the following legend:

“Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal or quotation.”

#### **52.216-1 TYPE OF CONTRACT (APR 1984)**

The Government contemplates awarding a cost reimbursement contract from this solicitation.

**THIS REQUIREMENT IS NOT A SMALL BUSINESS SET-ASIDE.**

#### **Instructions for Preparation of Proposals**

In responding to this solicitation please submit your proposal in four separate parts as follows:

##### **Part I - Technical Proposal**

A technical proposal, not to exceed 10 pages, describing how you would proceed if awarded a contract. Include the following elements in your technical proposal (see also the statement of work and the technical evaluation criteria):

- A. Technical and management approach.
- B. Assumptions, deviations, and exceptions (as necessary).
- C. Identify technical uncertainties, and make specific proposals for the resolution of any uncertainties.
- D. An organized workplan setting forth a specific schedule of the work to be performed as outlined in Section C, STATEMENT OF WORK. The workplan shall be in such a form as to establish a firm schedule of dates for the start and completion of all tasks as described in the statement of work.

##### **Part II - Staffing Proposal**

Provide the names of all personnel and the positions they will occupy as related to this project. The estimated professional and technical staffing shall be provided in staff-months. Biographical summaries of key personnel shall also be included.

NOTE: The staffing information shall be provided on a task by task basis by discipline in accordance with the format identified as Attachment 2, Section J.

The Principal Author shall devote at least 20 percent of his/her working time to the effort during the period of performance of Tasks A - C and serve as a principle resource during the performance of other Tasks.

**The following disciplines and/or expertise are believed to be necessary for the successful completion of this project:**

The Principal Author should be an experienced hydraulic engineer with broad exposure to highway drainage design. The Principal Author should have specific experience related to highway pump station design both manually and by the use of computer aids. The developer of the software must demonstrate experience and understanding of software program development. The training course developer must demonstrate experience and understanding of training course development including current training techniques and materials.

**The Government's estimate of staffing is shown below. The estimates are advisory. The estimates should be used as a general guide and not be considered as a maximum or minimum limit by the offerors in preparing their proposal.**

Task	<u>Labor Estimate (person-hours)</u>								Total
	A	B	C	F	G	J	K	N	
			D		H		L		
			E		I		M		
Principal Author Design Manual	100	100	400	40	80	40	40	40	840
Software Designer	40	40	0	0	0	60	220	40	400
Training Course Development	20	0	0	60	220	0	50	40	390
Technical Support Staff	70	100	380	30	100	30	100	0	810
Other Support Staff	0	40	120	30	100	40	40	40	410

### Part III - BUSINESS AND COST/PRICE PROPOSAL

This volume shall include all pricing information and certain general financial/organizational information, as described below:

#### A. Cost/Price Information

1. Cost and pricing data are not required in response to this solicitation because it is anticipated that the resultant contract award is at or below the cost or pricing data threshold (currently \$500,000). The Government will make a price analysis to determine the reasonableness of the price and any need for further negotiation. **Offerors are asked to submit information other than cost or pricing data by submitting the Standard Form 1448 and Price Proposal Budget Summary, see Section J, Attachment 3. This information other than cost or pricing data is necessary in order to help establish price reasonableness or price realism.**

NOTE: Travel will be reimbursed and for the purposes of this solicitation, assume travel and per diem costs of \$6,000.

#### 2. Facilities and Special Equipment, Including Tooling.

It is the general policy of the FHWA not to provide general or special purpose equipment, facilities, or tooling of a capital nature except in unusual circumstances. Items having a unit cost of less than \$1,000 will not be provided to you except as authorized with nonprofit institutions or State and local governments. **If special purpose equipment of a capital nature is being proposed, provide a description of the items, details of the proposed cost including competitive prices, and a justification as to why the Government should furnish the equipment or allow its purchase with contract funds.**

3. Your proposal must include a statement regarding availability of facilities and equipment necessary to accomplish the required work. If any or all of the required facilities are Government-owned, a complete listing of these facilities is required and the name of the cognizant Government agency furnishing the facilities and the facilities contract number(s).

#### 4. Subcontracts/Consultants.

If subcontractors and/or individual consultants will be used in carrying out the requirements of this project, the following minimum information concerning the subContractor shall be furnished:

- a. Name and address of the subcontractor or consultant.

b. Statement of work and work plan (schedule) for the portion of work to be conducted by the subcontractor or consultant.

c. Names and positions of personnel who will work on the project.

d. A letter or other statement from each proposed consultant and/or subContractor indicating that he has been approached on the matter of participation in this study and that he is willing and able to do so in the terms indicated.

5. ADP Services/Equipment.

**If ADP services are anticipated in carrying out the requirements of the project, the information set out in Attachment 4, Section J shall be completed, and the form shall be returned with your submission.**

B. Other Financial/Organizational Information

1. General Information. You must attach a supplemental sheet providing the following information:

- a. Indicate your fiscal year period (provide month to month dates).
- b. Indicate whether the proposed indirect cost rate(s) have been audited and accepted by any Federal audit agency. Give name, location and telephone number of the agency, and the date of acceptance.
- c. Indicate whether your system of control of Government property has been approved by a Government agency. If so, provide the name, location and telephone number of the Government agency, and date of approval.
- d. Indicate whether written purchasing procedures exist, and whether your purchasing system has been approved by a Government agency. If so, provide the name, location and telephone number of the cognizant agency, and date of approval.
- e. Indicate whether your cost estimating system has been approved by any Government agency. If so, provide the name, location and telephone number of the cognizant agency, and date of approval.
- f. Indicate whether your cost accumulation system has been approved by any Government agency. If so, provide the name, location and telephone number of the cognizant agency, and date of approval.

2. Past Performance References.

***The offeror is required to submit, as part of its proposal, information on all contracts involving similar or related services over the past three years with FHWA and/or other organizations (both commercial and Governmental). The information must include the name and address of the organization for which services were performed; the current telephone number of a responsible technical representative of the organization; the contract number, if applicable; the type of contract performed; and a brief description of***

*the services provided, including the period of performance.* FHWA may use this information to contact technical representative on previous contracts to obtain information regarding performance. Failure to provide complete information regarding previous similar and/or related contracts may result in eventual disqualification. The contracting officer will consider such performance information along with other factors in determining whether the offeror is to be considered responsible, as defined in FAR 9.101.

List any contract that was terminated for convenience of the Government within the past 3 years, and any contract that was terminated for default within the past 5 years. Briefly explain the circumstances in each instance.

### **Publications**

The FHWA publications may be obtained at the address below:

Research and Technology Report Center  
9701 Philadelphia Court, Suite Q  
Lanham, Maryland 20706  
(301) 577-0818

Federal Information Processing Standards Publication 38 (FIPS PUB) dated February 15, 1976, and FIPS PUB 64 dated August 1, 1979, are incorporated by reference and is available for purchase from:

National Technical Information Service  
5235 Port Royal Road  
Springfield, Virginia 22164  
(703) 487-4650

**Until a formal notice of award is issued, no communication by the Government either written or oral shall be interpreted as a promise that an award will be made.**

The Contracting Officer is the only individual who can legally commit or obligate the Government to the expenditure of public funds. No cost chargeable to the proposed contract can be incurred before receipt of a fully executed contract or specific written authorization from the Contracting Officer.

### **52.233-2 SERVICE OF PROTEST (OCT 1995)**

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General

Accounting Office (GAO) or the General Services Administration Board of Contract Appeals (GSBCA), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgement of receipt from Mr. Frank J. Waltos, HAM-20, Room 4404, 400 Seventh Street, SW., Washington, D.C. 20590.

(b) The copy of any protest shall be received in the office designated above on the same day a protest is filed with the GSBCA or within one day of filing a protest with the GAO.

(c) In this procurement, you may not protest to the GSBCA because of the nature of supplies or services being procured.

## **I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) SOLICITATION PROVISIONS**

### **52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE. (JUN 1988)**

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

52.215-5	Solicitation Definitions.	JUL 1987
52.215-7	Unnecessarily Elaborate Proposals or Quotations.	APR 1984
52.215-8	Amendments to Solicitations.	DEC 1989
52.215-9	Submission of Offers.	FEB 1997
52.215-10	Late Submissions, Modifications, and Withdrawals of Proposals.	FEB 1997
52.215-13	Preparation of Offers.	APR 1984
52.215-14	Explanation to Prospective Offerors.	APR 1984
52.215-15	Failure to Submit Offer.	JUL 1995
52.215-16	Contract Award.	OCT 1995
52.215-30	Facilities Capital Cost of Money.	SEP 1987

### **52.215-41 Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data. (JAN 1997)**

(a) Exceptions from cost or pricing data. (1) In lieu of submitting cost or pricing data, offerors may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable.

(i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(ii) For a commercial item exception, the offeror shall submit, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price for this acquisition.

Such information may include--

(A) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.

(B) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market.

(C) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.

(2) The offeror grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this provision, and the reasonableness of price. Access does not extend to cost or profit information or other data relevant solely to the offeror's determination of the prices to be offered in the catalog or marketplace.

(b) Requirements for cost or pricing data. If the offeror is not granted an exception

from the requirement to submit cost or pricing data, the following applies:

- (1) The offeror shall submit cost or pricing data on Standard Form (SF) 1411, Contract Pricing Proposal Cover Sheet (Cost or Pricing Data Required), with supporting attachments prepared in accordance with Table 15-2 of FAR 15.804-6(b)(2).

(2) As soon as practicable after agreement on price, but before contract award (except for unpriced actions such as letter contracts), the offeror shall submit a Certificate of Current Cost or Pricing Data, as prescribed in FAR 15.804-4.

**52.215-42 Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data--Modifications. (JAN 1997)**

(a) Exceptions from cost or pricing data.

(1) In lieu of submitting cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.804-2(a)(1) on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable--

(i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

(ii) Information on modifications of contracts or subcontracts for commercial items.

(A) If (1) The original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition, or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item, and (2) the modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.

(B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same

item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include:

(1) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.

(2) For market-price items, the source and date or period of the market quotation or other basis for market price, the base amount, and the applicable discounts. In addition, describe the nature of the market.

(3) For items included on an active Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule.

(2) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this clause, and the reasonableness of price. Access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.

(b) Requirements for cost or pricing data. If the Contractor is not granted an exception from the requirement to submit cost pricing data, the following applies:

(1) The Contractor shall submit cost or pricing data on standard Form (SF) 1411 Contract Pricing Proposal Cover Sheet (Cost or Pricing Data Required), with supporting attachments prepared in accordance with Table 15-2 of FAR 15.804-6(b)(2).

(2) As soon as practical after agreement on price, but before award (except for

unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.804-4.

52.227-6  
52.228-6

Royalty Information.  
Reserved.

APR 1984

## **II. DEPARTMENT OF TRANSPORTATION ACQUISITION REGULATION (48 CFR CHAPTER 12) SOLICITATION PROVISIONS**

### **52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (APR 1984)**

(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.

(b) The use in this solicitation of any Department of Transportation Acquisition Regulation (48 CFR Chapter 12) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the regulation.

## **SECTION M - EVALUATION FACTORS FOR AWARD**

### **Evaluation Criteria**

#### **A. Technical**

Technical proposals will be evaluated on the following criteria listed in order of descending importance (items 2 and 3 are of equal importance):

1. Offeror's demonstration that the proposed personnel have the educational background, recent professional experience and technical competence in all aspects of pump station design and highway hydraulics as set forth in the RFP and necessary to accomplish the development of a pump station design manual satisfactorily and on schedule.
2. Offeror's demonstration that the proposed personnel have the educational background, recent professional experience and technical competence in all aspects of computer modeling and highway hydraulics and hydrology necessary to develop the computer program to aid in the design of pump stations for highway facilities.
3. Offeror's demonstration that the proposed personnel have the professional experience and technical competence to develop a training course with its associated visual aids for use in training practicing highway engineers and technicians in subject areas relevant to the

contract objectives.

4. Offeror's demonstration that the contract objectives are understood and that the proposed support facilities and resources will be sufficient to complete the contract requirements satisfactorily and on schedule.

**B. Cost**

In addition to the criteria listed above, relative cost will be considered in the ultimate award decision. Cost/price proposals will be analyzed to assess realism and probable cost to the Government. The proposed costs may be adjusted, for the purpose of evaluation, based upon the results of the cost realism assessment.

**C. Past Performance**

Past performance will be reviewed to assure that the offeror has relevant and successful experience and will be considered in the ultimate award decision. Past performance will not be scored.

**D. Basis for Award**

The Government will accept the offer that is considered the most advantageous to the Government. Of the three factors, (A) technical, (B) cost, and (C) past performance, technical is considered the most important. For selection purposes, past performance is of less importance than technical or cost.

**FORMAT  
for  
MONTHLY PROGRESS REPORTS**

A. Accomplishments/Significant Findings by Task this Month:

B. Work Planned for Next Month by Task:

C. Effort Expended by Key Personnel:

**Effort (Staff-Hours)**

	<u>Employee Name</u>	<u>Contract Time</u> <u>Allocated</u>	<u>Cumulative</u> <u>Last Month</u>	<u>Cumulative</u> <u>This</u>
<u>Month</u>				

Princ. Investigator:

Other Key People:

D. ADP Usage:

**Usage**

<u>Item</u>	<u>Cost</u> <u>Allocated</u>	<u>Cumulative Cost</u> <u>Last Month</u>	<u>Time Used</u> <u>This Month</u>	<u>Cost</u> <u>This Month</u>	<u>Cum. Cost</u> <u>This Month</u>
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Labor:

Equipment:

E. Research Costs:

F. Identification of Problems/Recommended Solutions:

Contract Title:

Reporting Date:

Contract Number:

FISCAL SUMMARY BY TASK

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							Cumulative Percent Work Completed To Date
<u>Task</u>	<u>Title</u>	<u>Budgeted</u>	<u>Cumulative Last Month</u>	<u>This Month</u>	<u>Cumulative To Date</u>		<u>To Date</u>

**Sample Format**

RFP No. DTFH61-97-R-00033

Title: “Storm Water Pump Station Design and Training Material”

Proposal Submitted by: \_\_\_\_\_

Staffing Assignments/Task Breakdown

Name of Principal <sup>1/</sup> Role in Study

<u>TASKS</u>	<u>STAFF MEMBERS</u>	<u>STAFF-HOURS</u>	<u>TOTAL</u>

**NOTE:** All times shall be given in staff-hours.

1/ Biographies of each member shall be included in the staffing proposal.

**SAMPLE FORMAT  
PRICE PROPOSAL BUDGET SUMMARY**

**I. DIRECT LABOR**

{List each proposed individual or labor category (insert additional lines if needed). Indicate if escalation is included and how it is applied.}

<i>Staffing</i>	<i>Estimated Hours</i>	<i>Hourly Rate</i>	<i>Estimated Cost</i>
<b>Total Direct Labor</b>			

**II. LABOR OVERHEAD**

Overhead Rate: \_\_\_\_\_ Estimated Cost: \_\_\_\_\_

**III. SUBCONTRACTOR**

Direct Labor:

<i>Staffing</i>	<i>Estimated Hours</i>	<i>Hourly Rate</i>	<i>Estimated Cost</i>
<b>Total Direct Labor</b>			

Overhead Rate:

Other Direct Costs:

Travel:

G&A Rate:

Fee:

Total Estimated Cost:

**IV. TRAVEL**

Total Estimated Cost:

**V. OTHER DIRECT COSTS**

Total Estimated Cost:

**VI. GENERAL & ADMINISTRATIVE (G&A) EXPENSE**

G&A Rate: \_\_\_\_\_ Estimated Cost: \_\_\_\_\_

**VII. TOTAL ESTIMATED COST:**

\$ \_\_\_\_\_

**VIII. TOTAL FIXED FEE:**

\$ \_\_\_\_\_

**IX. TOTAL ESTIMATED COST AND FEE:**

\$ \_\_\_\_\_

## **PROSPECTUS**

### **"Storm Water Pump Station Design and Training Material"**

#### **Introduction**

Design of efficient storm drain facilities requires consideration of the collection and conveyance of storm water runoff through and along highway rights-of-way while minimizing highway flooding and erosion of adjacent property. A design event is chosen depending on the functional classification or the geometry of the highway. Various hydrologic methods are used to determine the discharge at a specific point in the watershed. The storm water is then conveyed by or through gutters, storm drain piping, channels, culverts and detention/water quality facilities before it is released into the natural environment. When depressed roadways exist, it may not be possible to gravity drain the collected water and pump stations are required.

Current literature specifically oriented to the design of highway pump stations for storm water is limited. The nature of the problems associated with highway storm water pump stations is such that most pump station design material, usually developed for municipal uses or large flood control works, is not directly applicable. FHWA published a two (2) volume document entitled *Manual for Highway Storm Water Pumping Stations* in 1982. This document is now outdated and needs to be updated.

At present, there are no known public domain software packages available for broad use that perform the basic calculations required for pump station design. A basic software package that will provide efficiency and versatility in the basic design processes involved in pump station design is needed.

The purpose of this contract is to develop a comprehensive, practical (user friendly), state-of-the-art highway storm water pump station design manual with an accompanying software design package and training course. The completed design manual will be an FHWA Hydraulic Engineering Circular. This circular will provide guidance on the design of highway storm water pump station facilities and contain the following: background, development of design methods and equations, design procedures, and manual problem solutions. The manual will be used for both individual design practice and classroom instruction and will be the basis for the software program and the training course to be developed as part of this project.